

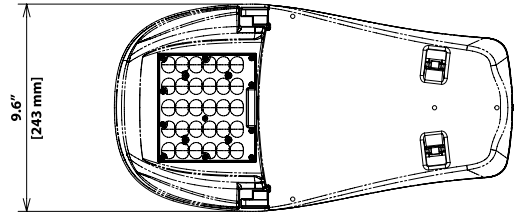
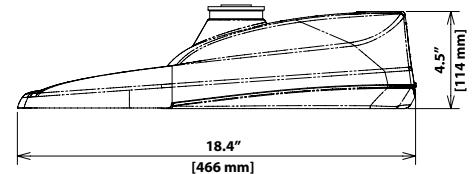
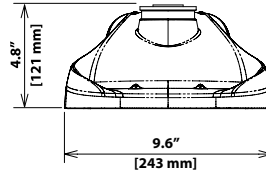
# GreenCobra™ Jr. LED Street Light

## GCJ J-Series Specification Data Sheet

Resubmitted 02/21/2023

### Luminaire Data

**Weight** 7.7 lbs [3.5 kg]  
**EPA** 0.39 ft<sup>2</sup>



### Ordering Information

Sample Catalog No. GCJ1-30J-MV-40K-2R-GY-055-PCR7-WL

Model*	LED Code	Voltage	Color Temperature	Distribution	Finish <sup>1</sup>	Output Code <sup>2</sup>	Options
GCJ1* GCJ2* GCJ3* GCJ4*	30J	MV 120-277V HV 347-480V	27K 2700K 30K 3000K 40K 4000K 50K 5000K	2R Type 2 3R Type 3R 3F Type 3F 4 Type 4 5 Type 5	GY Gray DB Dark Bronze BK Black	Refer to Page 3 to select the performance code.	<b>FOC</b> <sup>3</sup> Fixed Output Code <b>LPCR</b> Less Photocontrol Receptacle <b>PCR7</b> <sup>4</sup> ANSI 7-wire Photocontrol Receptacle <b>PCR7-CR</b> <sup>5</sup> Control Ready 7-wire PC Receptacle <b>MSL3</b> Motion Sensor, L3 Lens <b>MSL7</b> Motion Sensor, L7 Lens <b>WL</b> Utility Wattage Label <b>4B</b> 4-Bolt Mounting Bracket <b>RWG</b> Rubber Wildlife Guard <b>SWTB</b> Straight Wire Terminal Block <b>BBL</b> Bubble Level <b>DSC</b> Door Safety Cable <b>CF</b> <sup>6</sup> Coastal Paint Finish <b>SP2</b> <sup>7</sup> Extreme Surge Protection, 20KV/10KA, Fail-to-on <b>LSSP2</b> <sup>7</sup> Extreme Surge Protection, Fail-to-off, 20kV/10kA Rating

\* Refer to performance data table on page 3, 4 for specific model with corresponding output code

#### Notes:

- Gray, Black, and Dark Bronze standard. Consult factory for other finishes. See page 2 for RAL codes of Standard finishes.
- Specified output code is the factory set lumen performance. Refer to performance data table on page 3, 4 of this spec sheet. Field adjustable output selector enables fixture to be changed in the field to adjust light output for local conditions (not available with Fixed Output Code, FOC) or PCR7-CR option. Consult factory if wattage limits require a special drive current.
- Non-field adjustable, fixed output code. Specify required output code. Not available with PCR7-CR option.
- Includes output selector that enables field adjustability of light levels. Includes connectors to allow easy upgrade of wireless dimming via PCR7. Wireless node by others.
- Control-ready wired at factory for wireless node dimming (node by others). Output selector not included in the fixture. Not able to adjust above specified output code.
- Specify the CF Option for coastal installation. See warranty for details.
- Standard surge protection, 10KV/5kA, fail-to-on, meets enhanced surge protection based on ANSI 136.25-2015 3-part test.
- Flush mounted house side shield. Shield cuts light off at 1 mounting height behind luminaire. Gray frame with black louvres.
- Flush mounted cul-de-sac shield. Shield cuts light off at 1 mounting height behind luminaire and 2 times the mounting height on either side of luminaire. Gray frame with black louvres.
- Flush mounted front side shield cuts light off at approximately 1½ mounting height in front of luminaire (street side). Gray frame with black louvres.
- Specify Color (GY, DB, BK). Refer to Leotek web site for specific mounting details and drawings at <https://leotek.com/lighting-library/>
- Specify MV (120-277V) or HV (347-480V).

Accessories*	
<b>HSSJGCJ</b> <sup>8</sup>	House Side Shield, Snap-On*
<b>CSSJGCJ</b> <sup>9</sup>	Cul-De-Sac Side Shield, Snap-On*
<b>FSSJGCJ</b> <sup>10</sup>	Front Side Shield, Snap-On*
<b>SPB</b> <sup>11</sup>	Square Pole Horizontal Arm Bracket
<b>RPB</b> <sup>11</sup>	Round Pole Horizontal Arm Bracket
<b>PTB</b> <sup>11</sup>	Pole Top Tenon Horizontal Arm Bracket
<b>PTB2</b> <sup>11</sup>	Pole Top Tenon Horizontal Arm Bracket (2@180°)
<b>WB</b> <sup>11</sup>	Wall Horizontal Arm Bracket
<b>BSK</b>	Bird Deterrent Spider Kit
<b>LLPC</b> <sup>12</sup>	Long-Life Twist Lock Photocontrol
<b>SC</b>	Twist Lock Shorting Cap

\* Unless specified for field installation, Shields and Shorting Caps are shipped installed. All other options are shipped separately.



## Luminaire Specifications

### Housing

Die cast aluminum housing with universal two-bolt slip fitter mounts to 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter mast arm. One-piece aluminum housing provides passive heat-sinking of the LEDs and has upper surfaces that shed precipitation. Four-bolt mounting bracket (4B option) is available. Mounting provisions meet 3G vibration per ANSI C136.31-2010 Normal Application, Bridge & Overpass by independent lab. Mounting has leveling adjustment from ± 5° in 2.5° steps. All hardware is stainless steel. Electrical components are accessed without tools via die cast aluminum door with stainless steel quick release latches. Provided standard with removable polycarbonate wild life guard. For additional protection, optional rubber wildlife guard (RWG) which conforms snugly to the mast arm is offered.

### Light Emitting Diodes

LEDs produce minimum 90% of initial intensity at 60,000 hours of life per IES recommended lumen maintenance life projection based on 6 times the duration of the collected LM-80 data. For details on IESNA Position on LED Product Lifetime Prediction, PS-10-18. LEDs have correlated color temperature of 2700K (27K), 3000K (30K), 4000K (40K), or 5000K (50K) and 70 CRI minimum. LEDs are ROHS compliant, 100% mercury and lead free.

### Field Adjustability

LED lumen output can be changed in the field to adjust light output for local conditions (not available with PCR7-CR option). The specified output code will be the factory set output. Field adjustments can be made with the output selector included in the fixture. Field adjustable range shown in performance data table.

### Quality Control

Every luminaire is performance tested before and after a 2-hour burn-in period. Assembled in the USA.

### Optical Systems

Micro-lens optical systems produce IESNA Type 2, Type 3, Type 4, or Type 5 distributions and are fully sealed to maintain an IP66 rating. Luminaire produces 0% total lumens above 90° (BUG Rating, U=0). Optional house side shield cuts light off at 1/2 mounting height behind luminaire. Front side shield cuts light off at approximately one mounting height in front of the luminaire (street side). Cul-de-sac shield provides back and side light control for end of cul-de-sac applications. All shields are field installable without tools.

### Electrical

Rated life of electrical components is 100,000 hours. Uses isolated power supply that is 1-10V dimmable. Power supply is wired with quick-disconnect terminals. EMC meets or exceeds FCC CFR Part 15. Terminal block accommodates 6 to 14 gauge wire. Surge protection complies with IEEE/ANSI C62.41 Category C High, 10kV/5kA and ANSI C136.2-2015, 3-part test.

### Power Supply

IP66 rated power power supply with high power factor of > 90%. Auto sensing universal AC input from 120 to 277VAC (MV model) and 347 to 480VAC (HV mode) rated for both line to line and line to neutral applications. Maximum THD rating of 20%. Class 1 or Class 2. Built-in overheating protection mechanism will reduce drive current to LEDs and electrical components if the driver experiences unusual internal overheating situation. Built-in short circuit, voltage overload, and current overload protection with automatic recovery after correction.

### Controls

3-Wire photocontrol receptacle is standard. ANSI C136.41 7-wire (PCR7) photocontrol receptacles is available. All photocontrol receptacles have tool-less rotatable bases. Wireless control module is provided by others.

### Finish

Housing receives a durable, fade-resistant polyester powder coat finish with 3.0 mil nominal thickness. Standard finish tested to withstand 5000 hours in salt spray exposure per ASTM B117 and Coastal Finish per ASTM G85. Finish meets scribe creepage rating 8 per ASTM D1654. Finish tested 500 hours in UV exposure per ASTM G154 and meets ASTM D523 gloss retention.

### Listings/Ratings/Labels

Luminaires are UL listed for use in wet locations in the United States and Canada. All electronic components inside of the luminaire are NRTL damp location rated per ANSI 136.37-2011 Ingress Protection standard. International Dark Sky Association listed. Luminaire is qualified to operate at ambient temperatures of -40°C to 40°C. Assembled in the U.S.A

### Photometry

Luminaires photometrics are tested by certified independent testing laboratories in accordance with IES LM-79 testing procedures.

### Warranty

10-year limited warranty is standard on luminaire and components. See Leotek.com for warranty details.

### Vandal Resistance

Housing and optics rated to IK10

### Certification and Compliance

Luminaire complies with:  
ANSI: C136.2, C136.3, C136.10, C136.13, C136.15, C136.22, C136.31, C136.35, C136.37, C136.41, C62.41, C78.377, C82.77  
Other: FCC 47 CFR, IEC 60598, ROHS II, UL 1449, UL 1598

## Color Specifications

Order Code	Color	RAL #	Pantone Equivalent
<b>GY</b>	Gray	7040	429C
<b>BK</b>	Black	9004	426C
<b>DB</b>	Dark Bronze	6022	BLACK 2C

## TM21 Lumen Maintenance per IES TM21-11 Calculation

Model Number	60,000 Hours*	80,000 Hours	100,000 Hours
<b>GCJ1/2/3 30J</b>	>98.9%	>98.7%	>98.5%
<b>GCJ4</b>	>92.4%	>90.6%	>88.7%

\*Calculation based on IES position statement on Lumen Maintenance Life Projections

**Performance Data: 2700K (27K)**

All data nominal. IES files for all CCTs available at leotek.com.

Product	LED Code	Output Code	System Wattage (W)	Delivered Lumens (Lm) <sup>1</sup>	Efficacy (Lm/W)	Field Adjustable Output Range
GCJ1	30J	025	17	2397	141	↕
		035	26	3692	142	
		040	30	4140	138	
		045	34	4742	139	
GCJ2	30J	050	37	5291	143	↕
		060	44	6229	141	
GCJ3	30J	065	49	6734	137	↕
		075	54	7398	137	
		080	58	7830	135	
		085	64	8448	132	
		090	67	8813	132	
GCJ4	30J	100	70	9818	140	↕
		105	80	10876	136	
		115	87	11628	134	
		125	100	12840	128	

- Notes:
1. Nominal lumens. Normal tolerance ± 10% due to factors including distribution type, LED bin variance, and ambient temperatures.
  2. Maximum LED driver current is 500mA.

**Performance Data: 3000K (30K)**

All data nominal. IES files for all CCTs available at leotek.com.

Product	LED Code	Output Code	System Wattage (W)	Delivered Lumens (Lm) <sup>1</sup>	Efficacy (Lm/W)	Field Adjustable Output Range
GCJ1	30J	025	17	2533	149	↕
		040	27	4058	152	
		045	30	4560	152	
		050	34	5223	154	
GCJ2	30J	055	37	5550	150	↕
		065	44	6425	146	
GCJ3	30J	070	49	7062	145	↕
		075	54	7722	143	
		080	58	8236	142	
		090	64	8960	140	
		095	67	9380	140	
GCJ4	30J	105	70	10530	150	↕
		115	80	11683	146	
		125	87	12477	143	
		135	100	13784	138	

- Notes:
1. Nominal lumens. Normal tolerance ± 10% due to factors including distribution type, LED bin variance, and ambient temperatures.
  2. Maximum LED driver current is 500mA.

**Performance Data: 4000K (40K) and 5000K (50K)**

All data nominal. IES files for all CCTs available at leotek.com.

Product	LED Code	Output Code	System Wattage (W)	Delivered Lumens (Lm) <sup>1</sup>	Efficacy (Lm/W)	Field Adjustable Output Range
GCJ1	30J	025	17	2669	157	↕
		045	27	4299	161	
		050	30	4830	161	
		055	34	5532	163	
GCJ2	30J	060	37	5883	159	↕
		070	44	6864	156	
GCJ3	30J	075	49	7256	149	↕
		080	54	7992	148	
		085	58	8468	146	
		090	64	9216	144	
		095	67	9648	144	
GCJ4	30J	110	70	10936	156	↕
		120	80	12150	152	
		130	87	12987	149	
		140	100	14332	143	

- Notes:
1. Nominal lumens. Normal tolerance ± 10% due to factors including distribution type, LED bin variance, and ambient temperatures.
  2. Maximum LED driver current is 500mA.

**BUG Ratings: 2700K (27K)**

All data nominal. IES files for all CCTs are available at leotek.com.

Product & LED Code	Output Code	Type 2R	Type 3R	Type 3F	Type 4	Type 5
		BUG Rating	BUG Rating	BUG Rating	BUG Rating	BUG Rating
GCJ1 30J	025	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	035	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
	040	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
	045	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
GCJ2 30J	050	B2-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
	060	B2-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B3-U0-G3
GCJ3 30J	065	B2-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B3-U0-G1
	075	B2-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B3-U0-G1
	080	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G1
	085	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G1
	090	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
GCJ4 30J	100	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
	105	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
	115	B3-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
	125	B3-U0-G3	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2

**BUG Ratings: 3000K (30K)**

All data nominal. IES files for all CCTs are available at leotek.com.

Product & LED Code	Output Code	Type 2R	Type 3R	Type 3F	Type 4	Type 5
		BUG Rating	BUG Rating	BUG Rating	BUG Rating	BUG Rating
GCJ1 30J	025	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
	040	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
	045	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
	050	B2-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
GCJ2 30J	055	B2-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
	065	B2-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B3-U0-G3
GCJ3 30J	070	B2-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B3-U0-G1
	075	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G1
	080	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G1
	090	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
	095	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
GCJ4 30J	105	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
	115	B3-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
	125	B3-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
	135	B3-U0-G3	B2-U0-G2	B2-U0-G2	B2-U0-G2	B4-U0-G2

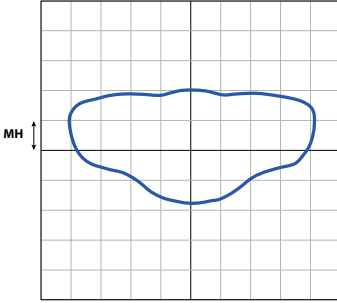
**BUG Ratings: 4000K (40K) and 5000K (50K)**

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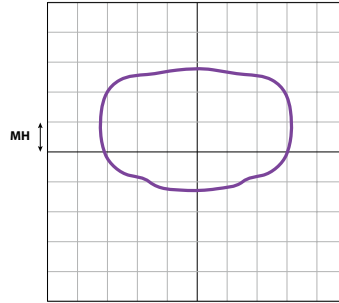
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		BUG Rating	BUG Rating	BUG Rating	BUG Rating	BUG Rating
GCJ1 30J	025	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
	045	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
	050	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G1
	055	B2-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B3-U0-G1
GCJ2 30J	060	B2-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G1	B3-U0-G1
	070	B2-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B3-U0-G1
GCJ3 30J	075	B2-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G1
	080	B2-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G1
	085	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G1
	090	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
	095	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
GCJ4 30J	110	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
	120	B3-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
	130	B3-U0-G3	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
	140	B3-U0-G3	B2-U0-G2	B2-U0-G2	B3-U0-G2	B4-U0-G2

**Optical Distribution**

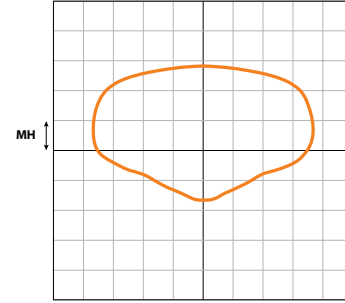
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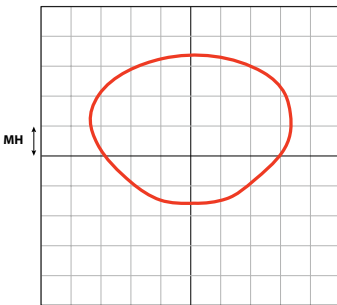
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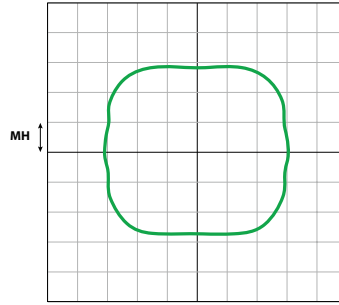
Type 3F



Type 3R



Type 4



Type 5